NEW CLAIM LANGUAGE WITH INCORPORATED AMENDMENTS

1. An electronic device for receiving broadcast media comprising digital signal information comprising:

a central processing unit (CPU) for processing digital signal information;

a storage medium for storing electronic data;

a display;

a user interface; and

a digital audio broadcast receiver which receives a digital signal transmitted by a digital audio transmitter and decodes the received digital signal for use by the CPU to update electronic data stored at said storage medium with said digital signal information.

4. The device of claim 3 further comprising a display processing means for selectively displaying updated records.

12. A system for handling broadcast media comprising:

a transmitter comprising a broadcast server for transmitting a digital audio broadcast; and

an electronic device comprising a central processing unit (CPU) for processing digital signal information, a storage medium for storing electronic data; a display; a user interface; and a digital audio broadcast receiver which receives a digital signal transmitted by a digital audio transmitter and decodes the received digital signal for use by the CPU to update electronic data stored at said storage medium with said digital signal information.

23. A method of providing broadcast media for updating the contents of a portable electronic device, the method comprising the steps of:

broadcasting a digital audio signal over a broadcast range;

receiving the signal at a digital audio receiver;

decoding the digital audio signal to obtain update data; and

updating the contents of the portable electronic device using the update data.

25. The method of claim 23 wherein the broadcast media comprises media of a non-interactive nature selected from

the group consisting of electronic editions of newspapers, magazines, books, movies, digitized audio data, program-associated data, program titles, program notes, CD cover images, and pure data.

27. The method of claim 23 further comprising scanning the digital audio signal for media content.

37. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for updating the contents of a portable electronic device, the method comprising the steps of:

receiving a digital audio signal at a digital audio receiver;

decoding the digital audio signal to obtain update data; and

updating the contents of the portable electronic device using said update data.

Claims

1. A electronic device for receiving broadcast media comprising:

    a central processing unit (CPU);

    a storage medium;

5   a display;

    a user interface; and

    a digital audio broadcast receiver which receives a digital signal transmitted by a digital audio transmitter and decodes the received digital signal for use by the CPU.

2. The device of claim 1 wherein the device comprises an electronic book.

10 3. The device of claim 1 wherein the device comprises a portable database of medical records stored at said storage medium and wherein the digital broadcast transmitted by the digital audio transmitter updates said medical records of a patient.

4. The device of claim 4 further comprising display processing mean for selectively displaying updated records.

15 5. The device of claim 1 including a smart card reader and processing software, which permits a means of payment to the broadcaster of said digital signal from said digital audio transmitter.

6. The device of claim 1 wherein the digital audio broadcast receiver is a radio receiver which extracts and delivers a digital data stream from a broadcast channel.

7. The device of claim 1 wherein the device further includes a storage and retrieval device.

20 8. The device of claim 1 wherein the device further comprises a smart card reader and associated smart card data processing software for handling a smart card.

9. The device of claim 8 wherein the smart card has a cryptographic decryption key stored thereon for providing metered access to the broadcast media.

10. The device of claim 9 further comprising a counter and wherein the cryptographic decryption key on the smart card is associated with a count and wherein the counter decrements the count
5 each time at least part of the digital signal is decrypted.

11. The device of claim 9 wherein the counter is decremented for each page downloaded.

12. A system for handling broadcast media comprising:
    a transmitter comprising a broadcast server for transmitting a digital audio broadcast; and
    an electronic device comprising a central processing unit (CPU), a storage medium; a
10 display; a user interface; and a digital audio broadcast receiver which receives a digital signal transmitted by a digital audio transmitter and decodes the received digital signal for use by the CPU.

13. The system of claim 12 wherein the digital audio transmitter broadcasts dynamically changing channel configurations in which channel bandwidth is dynamically adapted to the broadcast media
15 being transmitted.

14. The system of claim 13 wherein the channel configuration is dynamically changed by identifying broadcast media which is not likely to require all available bandwidth, calculating excess available bandwidth, and allocating the excess in a manner which provides sufficient bandwidth for transient subchannels.

20 15. The system according to claim 12 wherein the digital audio broadcast includes content identifiers associated with the type of media broadcast; wherein the device includes a screening device which selectively permits the downloading of broadcasts according to said content identifiers.

16. The system of claim 12, wherein the device further comprises means to periodically scan a broadcast channel for specific content.

17. The system of claim 12 wherein the electronic device further comprises a smart card reader and associated smart card data processing software for handling a smart card.

5   18. The system of claim 17 wherein the smart card has a cryptographic decryption key stored thereon for providing metered access to the broadcast media.

19. The system of claim 18 further comprising a counter and wherein the cryptographic decryption key on the smart card is associated with a count and wherein the counter decrements the count each time at least part of the digital signal is decrypted.

10   20. The system of claim 17 wherein the smart card reader and associated smart card data processing software enable payment to the broadcaster whereby the broadcaster broadcasts an encrypted signal and charges a set fee for a smart card having a decryption key encoded thereon and for which the smart card reader and associated smart card data processing software are capable of decrypting the signal only during a certain period of time.

15   21. The system of claim 20 wherein, when inserted in a smart card reader of the device, the smart card enables unlimited access to the broadcast signal only during the certain period of time.

22. The system of claim 21 wherein the broadcast media is transmitted with the matching key, thus enabling only those having the proper decryption key to decode the broadcast media.

23. A method of providing broadcast media for updating the contents of a portable electronic
20   device, the method comprising the steps of:
        broadcasting a digital audio signal over a broadcast range;
        receiving the signal at a digital audio transmitter;
        decoding the digital audio signal to obtain update data; and

updating the contents of the portable electronic device using said update data.

24. The method of claim 23 further comprising a smart card to meter access to the broadcast media.

25. The method of claim 23 wherein the static media comprises media of a non-interactive nature
5 selected from the group consisting of electronic editions of newspapers, magazines, books, movies, digitized audio data, program-associated data such as program titles, program notes, CD cover images, and pure data.

26. A method for providing broadcast media comprising the steps of :
    broadcasting a digital audio broadcast over a broadcast range;
10   receiving the signal at a digital audio transmitter; and
    decoding the digital audio signal.

27. The method of claim 26 further comprising scanning the digital audio broadcast for desired media content.

28. The method of claim 27 wherein said scanning for desired media content comprises
15   attempting to match at least one of a user profile, a specific user request or a subscription.

29. The method of claim 26 further comprising encrypting said signal prior to broadcasting.

30. The method of claim 29 further comprising decrypting at least a portion of the broadcast.

31. The method of claim 30 wherein the decrypting comprises using a decryption key encoded
20   on a smart card.

32. The method of claim 26 further comprising registering the broadcast received.

33. The method of claim 26 further comprising associating a debit with the broadcast received for billing purposes.

34. The method of claim 26 wherein the digital audio broadcast includes content identifiers associated with the type of media broadcast and further comprising the step of screening to
5 selectively permit the downloading of broadcasts according to said content identifiers.

35. The method of claim 26 further comprising said digital audio transmitter broadcasting dynamically changing channel configurations in which channel bandwidth is dynamically adapted to the broadcast media being transmitted.

36. The system of claim 35 wherein the channel configuration is dynamically changed by
10 identifying broadcast media which is not likely to require all available bandwidth, calculating excess available bandwidth, and allocating the excess in a manner which provides sufficient bandwidth for transient subchannels.

37. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for updating the contents of a
15 portable electronic device, the method comprising the steps of:

    receiving a digital audio signal at a digital audio transmitter;

    decoding the digital audio signal to obtain update data; and

    updating the contents of the portable electronic device using said update data.